



PCT09

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/743,885A

DATE: 05/02/2002

TIME: 17:07:38

Input Set : A:\743885seq.mar.txt

Output Set: N:\CRF3\05022002\I743885A.raw

p.6

ENTERED

3 <110> APPLICANT: CREEMERS, Jantina  
 4 ANGENENT, Gerrit  
 5 KATER, Martin  
 7 <120> TITLE OF INVENTION: Process to collect metabolites from modified nectar by  
 8 insects  
 10 <130> FILE REFERENCE: U-13212-4  
 12 <140> CURRENT APPLICATION NUMBER: 09/743885A  
 13 <141> CURRENT FILING DATE: 2001-01-16  
 15 <160> NUMBER OF SEQ ID NOS: 29  
 17 <170> SOFTWARE: PatentIn Ver. 2.1  
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 28 <223> OTHER INFORMATION: tissue type: nectar gland  
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 31 <223> OTHER INFORMATION: NEC1 amino acid sequence  
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 35 1 5 10 15  
 37 Gly Asn Ile Val Ser Phe Met Val Phe Leu Ala Pro Val Pro Thr Phe  
 38 20 25 30  
 40 Tyr Lys Ile Tyr Lys Arg Lys Ser Ser Glu Gly Tyr Gln Ala Ile Pro  
 41 35 40 45  
 43 Tyr Met Val Ala Leu Phe Ser Ala Gly Leu Leu Leu Tyr Tyr Ala Tyr  
 44 50 55 60  
 46 Leu Arg Lys Asn Ala Tyr Leu Ile Val Ser Ile Asn Gly Phe Gly Cys  
 47 65 70 75 80  
 49 Ala Ile Glu Leu Thr Tyr Ile Ser Leu Phe Leu Phe Tyr Ala Pro Arg  
 50 85 90 95  
 52 Lys Ser Lys Ile Phe Thr Gly Trp Leu Met Leu Leu Glu Leu Gly Ala  
 53 100 105 110  
 55 Leu Gly Met Val Met Pro Ile Thr Tyr Leu Leu Ala Glu Gly Ser His  
 56 115 120 125  
 58 Arg Val Met Ile Val Gly Trp Ile Cys Ala Ala Ile Asn Val Ala Val  
 59 130 135 140  
 61 Phe Ala Ala Pro Leu Ser Ile Met Arg Gln Val Ile Lys Thr Lys Ser  
 62 145 150 155 160  
 64 Val Glu Phe Met Pro Phe Thr Leu Ser Leu Phe Leu Thr Leu Cys Ala  
 65 165 170 175

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67 Thr Met Trp Phe Phe Tyr Gly Phe Phe Lys Lys Asp Phe Tyr Ile Ala
68      180      185      190
70 Phe Pro Asn Ile Leu Gly Phe Leu Phe Gly Ile Val Gln Met Leu Leu
71      195      200      205
73 Tyr Phe Val Tyr Lys Asp Ser Lys Arg Ile Asp Asp Glu Lys Ser Asp
74      210      215      220
76 Pro Val Arg Glu Ala Thr Lys Ser Lys Glu Gly Val Glu Ile Ile Ile
77 225      230      235      240
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83      260      265
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90 <213> ORGANISM: Petunia x hybrida
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95 <220> FEATURE:
96 <223> OTHER INFORMATION: tissue type: nectar gland, secretory cell
98 <220> FEATURE:
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106      20      25      30
108 Tyr Glu Leu Ser Val Leu Cys Asp Ala Glu Val Ala Leu Ile Val Phe
109      35      40      45
111 Ser Ser Arg Gly Arg Leu Tyr Glu Tyr Ala Asn Asn Ser Val Lys Ala
112      50      55      60
114 Thr Ile Asp Arg Tyr Lys Lys Ala Ser Ser Asp Ser Ser Asn Thr Gly
115 65      70      75      80
117 Ser Thr Ser Glu Ala Asn Thr Gln Phe Tyr Gln Gln Glu Ala Ala Lys
118      85      90      95
120 Leu Arg Val Gln Ile Gly Asn Leu Gln Asn Ser Asn Arg Asn Met Leu
121      100      105      110
123 Gly Glu Ser Leu Ser Ser Leu Thr Ala Lys Asp Leu Lys Gly Leu Glu
124      115      120      125
126 Thr Lys Leu Glu Lys Gly Ile Ser Arg Ile Arg Ser Lys Lys Asn Glu
127      130      135      140
129 Leu Leu Phe Ala Glu Ile Glu Tyr Met Arg Lys Arg Glu Ile Asp Leu
130 145      150      155      160
132 His Asn Asn Asn Gln Met Leu Arg Ala Lys Ile Ala Glu Ser Glu Arg
133      165      170      175
135 Asn Val Asn Met Met Gly Gly Glu Phe Glu Leu Met Gln Ser His Pro
136      180      185      190
138 Tyr Asp Pro Arg Asp Phe Phe Gln Val Asn Gly Leu Gln His Asn His
139      195      200      205

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183 cttcttggtg atattgtatc attcatgggc ttccctagcac ccgtgccaac attttacaaa 180
184 atatataaaa ggaaatcatc agaaggatat caagcaatac catatatggt agcactgttc 240
185 agcgccggac tattgctata ttatgcttat ctcaggaaga atgcctatct tatcgtcagc 300
186 attaatggct ttggatgtgc cattgaatta acatatatct ctctgtttct cttttacgcg 360
187 cccagaaagt ctaagatttt cacagggtgg ctgatgctct tagaattggg agccctagga 420
188 atggtgatgc caattactta tttattagca gaaggctcac atagagtgat gatagtggga 480
189 tggatttggt cagctatcaa tgttgctgtc tttgctgctc ctttaagcat catgaggcaa 540
190 gtaataaaaa caaagagtgt agagttcatg cccttcaact tatctttggt cctcactctc 600
191 tgtgccacta tgtggttttt ctatgggttt ttcaagaagg actttttacat tgcgtttcca 660
192 aatatactgg gctttctatt cggaatcggt caaatgctat tataattttgt ttacaaggat 720
193 tcaaagagaa tagatgatga aaaatctgat cctgttcgag aagctacaaa atcaaaagaa 780
194 ggtgtagaaa tcattatcaa cattgaagat gataattctg ataacgcatt gcagtccatg 840
195 gagaaggatt tttccagact gcggacatca aaataagcaa gaagatgatc aaaaaatgac 900
196 aaagctaagg agtttgaagt aaggcaagga acttgacact gaatatctaa gctaattagc 960
197 aagactttag cagcttgtaa tatttagtgt ttgtgagggt ttaccttata attagcttgt 1020
198 agcatagcct tcccactaat aattctgctt agcgaatctt atatatggga aatacttaca 1080
199 ctagtatgca tcttctatat acatgtttgg cacttgacta tacatagaaa aattaacaag 1140
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201 acccc
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205 <211> LENGTH: 1157
206 <212> TYPE: DNA

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207 <213> ORGANISM: Petunia x hybrida
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216 <223> OTHER INFORMATION: cDNA library of nectaries from Petunia hybrida
217     flowers
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220 <223> OTHER INFORMATION: FBP15
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226 ggggaagagga aagattgaga ttaagaggat tgaaaataca acaaatcgtc aagtcacttt 240
227 ctgtaagaga agaaatgggt tgcttaaaaa agcttatgaa ctttctgttc tttgtgatgc 300
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236 gaacggctta cagcataatc atcaatatcc acgccaagac aacatggctc ttcaattagt 840
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238 tataaggag tgcaaggccat ttgccaatta ttgaaagta ctcaaacagg aagttgaaga 960
239 agttcatcat ctctctcatc tatatgtctt aacaaaagtc ttagcttatg gactctaaaa 1020
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267 <223> OTHER INFORMATION: NEC1 promoter
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## RAW SEQUENCE LISTING

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270 cctaggagaa atcaagccta ctcttaagat ggatgactca cttgccccga tggtaagggtg 60
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272 tatgaagagg accaagaagc tccaataatt ttgggaagag cattcttaat cacatcgatg 180
273 gcaattattg acatggaact tggggagatg actgtgagag cgcattggaga aaagggttact 240
274 ttcaaggttt ataataaaaa ggatcatatg gctaagtttg aagagtgttc tttgatagaa 300
275 tgtgtcagac gagaacatga aagtaaaccg aaagagggtg ttgagcggaa tgtagaacaa 360
276 agtgaccacg gcacaataat tgacaagttg aaggaaaatt cacctaaagg aaggaagaag 420
277 acaaaagttc gtcgtaacaa gaggagacgt aaatgctgga agtgagctta aagggtgtgtg 480
278 cgtactacga cgttaactaa ggcgcttgct gggaggcaac cctagctttg tatgtaaagt 540
279 taaaagtaaa aaatatatat atagaaaaag gaaaatacaa aaagagtcgt gccgcgacgt 600
280 taaatcaagc gcttggttga aggcaaccca atttttattg ttttagttgt tttacttatt 660
281 tagtattacg tagtttcttg ttgtttttgt agggctcggg actttcggaa ggtgaggtaa 720
282 tttcaaggca tcgcggtgtg tattgcagcg aggtaagtgt aagagttgag ttggaagcgt 780
283 ttggccaagt gttgcaccgt gagaggcttt caacctgttg cgacacgtga aaaattaaga 840
284 gccagatctg ctacattagc actgaagcat cgcttgcca atagcttgga atggaagcaa 900
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286 caaactagtg aacgcagaaa tagaaatgct acagccatg cgtcgtcttg cttatggcag 1020
287 gcagcaaaaa ttcagcagca aaacagaaac gctgcgagaa acgcgtcgca tacgccatag 1080
288 ctttgtgtca aacagaacgt ccagaaattg aaaagctata agcctgcgtc gcttggtctca 1140
289 tggcgtgcag actagaaaag ctctagcaga tgcgtcgcgt attgtatagc ttggtgtgaa 1200
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294 ccatttttct gcttcaaaag tttaaattat taatatgata agtcatccat agtcaaacaa 1500
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296 aacattgttt gcaagtgtac aatttttagt tatgcaaacc aacgcttctt cttccaacta 1620
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302 ttaacctca tatatctttt ggccaaataa agaaaaagtc tgcatatttc ttgccaaaca 1980
303 tttatcatac tttaccgaat tcttgttttt tgtttctctg ttgttgttct ccactataaa 2040
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323 <212> TYPE: DNA
324 <213> ORGANISM: Artificial Sequence

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RAW SEQUENCE LISTING ERROR SUMMARY  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:17; N Pos. 9